Remarks/Arguments

The Office Action dated May 20, 2004 has been reviewed in detail and the application has been amended in the sincere effort to place the same in condition for allowance.

Applicant retains the right to pursue broader claims via a continuing application under 35 U.S.C. § 120.

Elections/Restrictions:

In an earlier Office Action, dated January 29, 2004 (and the amended Office Action dated February 17, 2004), the Examiner required an election under 35 U.S.C. § 121. In a Response, dated February 27, 2004, Applicant traversed this election requirement, but provisionally elected Group 1, Claims 1-22 and 41-53 for Examination.

In the instant Office Action the Examiner has withdrawn Claims 23-40 from prosecution, apparently finalizing this restriction requirement. In response, Applicant has canceled claims 23-40 herein, without prejudice. However, Applicant reserves the right to have these claims reintroduced should the restriction requirement be withdrawn, or the right to file a divisional application thereon in accordance with 35 U.S.C. § 120 and 121.

Indication of Allowable Subject Matter:

On page 11 of the outstanding Office Action the Examiner indicated that Claims 6, 10, 11, 13, 16, 20, 42, 46, 47, and 49 "are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims."

In response thereto, as to Claims 6, 10, 11, 13 and 16: Claim 6 has been rewritten in independent form and now contains the limitations from its base claim (Claim 1) and intervening claim (Claim 2); likewise, Claim 10 has been rewritten in independent form, and now includes the limitations of its base claim (Claim 1) and intervening claims (Claims 9, 8, and 7); Claim 13 has been rewritten in independent form as well, and now includes the limitations of its base claim (Claim 1) and intervening claims (Claims 8 and 7); and the limitations of Claim 16 have been incorporated into its base claim (Claim 1), and Claim 16 has been canceled herein.

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As a result, amended independent Claims 1, (which now has the subject matter from allowable Claim 16), 6, 10, 11, 13 are believed to be in condition for allowance. Because Claims 2-5, 7-9, 12, 14, and 15 depend from amended independent Claim 1, by virtue of this dependence, they are believed to be in condition for allowance as well, and the same is respectfully requested.

As to Claim 20, the limitations of Claim 20 have been rewritten into independent form to include the limitations of its base claim (Claim 19), and Claim 19 has been canceled herein. As to Claim 42, it has been rewritten in independent form, and now includes the limitations of its base claim (Claim 41). As to Claims 46 and 49: Claim 46 has been rewritten in independent form, and now includes the limitations of its base claim (Claim 41) and intervening claims (Claims 45, 44, and 43); and Claim 49 has been rewritten in independent form, and now includes the limitations of its base claim (Claim 41) and intervening claims (Claims 44, and 43). As a result, Claims 20, 42, 46, and 49 are now believed to be in condition for allowance. Because Claim 47 depends from amended Claim 46 it also is believed to be in condition for allowance, and the same is respectfully requested.

However, for the reasons set forth below, it is believed that Applicant is entitled to additional and broader claim coverage.

Rejections Under 35 U.S.C. § 102:

Claims 1-2 were rejected under 35 U.S.C. 102(b) as being anticipated by Yost (5,393,980). Specifically, the Examiner stated:

Yost et al, for Claim 1, an apparatus for performing quality inspections on a test surface comprising: a device for producing optical radiation having a plurality of different spectrum lines, selecting at least one of the spectrum lines, and directing the selected spectrum line to the test surface; and circuitry for detecting a current of photoelectrons emitted from the test surface, generating a signal indicative of photoelectron current, and indicating a condition of quality based on the generated signal indicative of photoelectron current.

The Yost reference discloses an improvement on an OSEE device for detecting the presence and thickness of surface contamination (Column 1, lines 15-21; Column 15, lines 29-52). As explained above, independent Claim 1 has been amended herein to include the allowable subject matter of Claim 16. Independent Claim 1 now recites:

An apparatus for performing quality inspections on a test surface comprising: a device for producing optical radiation having a plurality of different spectrum lines, selecting at least one of the spectrum lines, and directing the selected spectrum line to the test surface;

circuitry for detecting a current of photoelectrons emitted from the test surface, generating a signal indicative of photoelectron current, and indicating a condition of quality based on the generated signal indicative of photoelectron current;

the indicating circuitry comprising an arrangement for evaluating the generated signal to thus distinguish between at least one of:

surface contamination and oxidation; and different species of contaminants.

Therefore, it is respectfully contended that the instant invention, as recited in Claim 1, is not anticipated by the Yost reference. The Yost prior art does not teach the "an arrangement for evaluating the generated signal to thus distinguish between at least one of: surface contamination and oxidation; and different species of contaminants."

Based on the above, it is believed that Claim 1 is not anticipated by the Yost reference. Because Claim 2 depends from what is believed to be an allowable base claim, Claim 1, both of these claims are now believed to be in condition for allowance. Therefore, reconsideration and withdrawal of the present rejections are respectfully requested.

Rejections Under 35 U.S.C. 103(a):

The Examiner rejected Claims 3-5, 7-9, 12, 14, 15, 17-19, 21, 22, 41, 43-45, 48, 50, and 51-53 under 35 U.S.C. § 103 (a). Specifically, the Examiner stated: "Claim *** [sic] [3-5, 7-9, 12, 14, 15, 17-19, 21, 22, 41, 43-45, 48, 50, and 51-53] rejected under 35 U.S.C. § 103(a) as being unpatentable over Yost et al (U.S. Patent 5393980), as applied to claims 1 and 2 above, and further in view of Hill (U.S. Pat. No. 6480285 B1)."

In response thereto, Claims 18, 19, and 52 have been canceled herein, thereby rendering this rejection as to them moot.

As explained immediately above, independent Claim 1 has been amended herein to include the allowable subject matter of Claim 16. Therefore, it is respectfully contended that the instant invention, as recited in Claim 1, is not rendered obvious by the applied references, either alone or in combination. Neither the Yost nor Hill reference teaches or suggests "an arrangement for evaluating the generated signal to thus distinguish between at least one of: surface contamination and oxidation; and different species of contaminants," as recited in Claim

1. Because Claims 2-5, 7-9, 12, 14-15 depend from what is believed to be an allowable base claim, Claim 1, by virtue of this dependence, these claims are also believed to be in condition for allowance.

Similar to amended Claim 1, independent Claims 17, 21 and 41 have each been amended herein to include what is believed to be the same or similar allowable subject matter as recited in Claim 16. Namely, Claim 17 now recites:

the means for indicating a condition of quality current being capable of distinguishing between:

surface contamination; surface corrosion; and different species of contaminants.

Claim 21 now recites:

the indicating circuitry comprising an arrangement for evaluating the generated signal to thus distinguish between at least one of:

surface contamination and corrosion; and different species of contaminants.

Similarly, Claim 41 now recites:

the means for indicating a condition of quality comprising means for distinguishing between at least one of:

surface contamination; surface oxidation; and different species of contaminants.

In light of the above, independent Claims 17, 21 and 41 are believed to fully distinguish over the applied art, and thus to be in condition for allowance. Because Claims 22, 43-45, 48, 50, 51 and 53 depend from what is believed to be an allowable base claim, namely, either independent Claim 21 or Claim 41, it is respectfully submitted that these claims are also in conditions for allowance.

Based on the above, Claims 1-5, 7-9, 12, 14, 15, 17, 21, 22, 41, 43-45, 48, 50, and 53 are believed to be in condition for allowance, therefore reconsideration and withdrawal of the present rejections are respectfully requested.

CONCLUSION

It is submitted that Applicant has submitted a new and unique Optically Stimulated Electron Emission Contamination Monitor and Method. In view of the above, it is submitted that Claims 1-15, 17, 20-22, 41-51 and 53 are in condition for allowance. Therefore, it is requested that a Notice of Allowance be issued at an early date.

Respectfully submitted,

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